

The opinion in support of the decision being entered today is
not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN C. FALLIN

Appeal 2007-3379
Application 10/631,202
Technology Center 1700

Decided: September 6, 2007

Before THOMAS A. WALTZ, CATHERINE Q. TIMM, and
JEFFREY T. SMITH, *Administrative Patent Judges*.

TIMM, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's decision rejecting claims 1 and 4-6. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

I. BACKGROUND

The invention relates to a coated animal feed supplement. Claim 1 is illustrative:

1. A coated granular animal feed supplement comprising a coating, wherein the coating is only hydrogenated fat formed on an inorganic feed supplement wherein the inorganic feed supplement is shielded to reduce reaction with moisture and acids and bases.

The Examiner relies upon the following prior art references to show unpatentability:

Galler	US 3,196,018	Jul. 20, 1965
<i>Potassium Carbonate Handbook</i> 1-12, Armand Products Co., (Sep. 2000) (hereafter "Armand")		

The Examiner rejects claims 1 and 4-6 under 35 U.S.C. § 103(a) as being unpatentable over Galler in view of Armand.

Appellant does not argue any claim separately with any degree of specificity (Br. 7-9¹), therefore, we select one claim, claim 1, to decide the issues on appeal.

II. DISCUSSION

The issue on appeal arising from the contentions of Appellant and the Examiner is: Has Appellant shown that the Examiner reversibly erred in rejecting claim 1 as obvious in view of the teachings of Galler and Armand?

In answering this question we consider the evidence. A preponderance of the evidence of record supports the following Findings of Facts (FF) based on the evidence of record:

¹ References to the Brief are to the Brief filed August 16, 2006.

1. Galler describes coated particles of menadione bisulfite adduct (MBA) (Title; col. 1, ll. 8-11). MBA is a vitamin K active material used as an animal feed supplement (Galler, col. 1, ll. 8-19).
2. Moisture decomposes MBA (Galler, col. 1, ll. 65-71), and Galler describes coating the MBA particles to protect the particles from contact with moisture (Galler, col. 3, ll. 13-17).
3. Galler selects a coating or film material that is non-toxic and substantially impermeable to moisture, yet readily penetrated by digestive fluids (Galler, col. 3, ll. 24-28). Several such film materials were found to produce excellent results including hydrogenated tallow (Galler, col. 3, ll. 28-34).
4. Galler's listing of useful film material suggests that each material is useful by itself as a film material (Galler, col. 3, ll. 28-34). Galler exemplifies the individual use of film materials as well as a mixture. Galler describes nine examples (col. 7 table), one with no coating (Example I), seven with a single ingredient coating (Examples II-VIII), and one with a two component coating of methyl cellulose and hydrogenated tallow (Example IX). As a whole, Galler suggests that hydrogenated tallow can be used alone as the coating or film material or as a mixture with other film materials.
5. The film materials of Galler have a range of chemical compositions including hydrogenated fat, fatty acids, alkyl celluloses, shellac, and waxes (Galler, col. 3, ll. 28-34). The film materials are selected on the basis of their moisture impermeable film forming ability, non-toxicity, and digestibility rather than on the basis of their specific chemistry (Galler, col. 3, ll. 24-34).

6. MBA is not an “*inorganic* feed supplement” as required by claim 1 (Claim 1 (emphasis added)).
7. Armand Products Company manufactures anhydrous potassium carbonate (Armand, p. 6, first paragraph).
8. According to Armand, potassium carbonate is conventionally used as a cattle feed additive (Table on p. 5).
9. Armand counsels those of ordinary skill in the art of anhydrous potassium carbonate to protect the anhydrous potassium carbonate from moisture because it was known to degrade upon moisture absorption (Armand, p. 15, paragraph bridging columns 1 and 2; see also p. 21, first paragraph).

“On appeal to the Board, an applicant can overcome a rejection by showing insufficient evidence of *prima facie* obviousness or by rebutting the *prima facie* case with evidence of secondary indicia of nonobviousness.” *In re Kahn*, 441 F.3d 977, 985-86, 78 USPQ2d 1329, 1335 (Fed. Cir. 2006) (emphasis omitted).

“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.’” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1734, 82 USPQ2d 1385, 1391 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art, and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co.*,

383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966). *See also KSR*, 127 S. Ct. at 1734, 82 USPQ2d at 1391 (“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”).

“The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR*, 127 S. Ct. at 1739, 82 USPQ2d at 1395. The question to be asked is “whether the improvement is more than the predictable use of prior art elements according to their established functions.” *KSR*, 127 S. Ct. at 1740, 82 USPQ2d at 1396. Moreover, one of the ways in which a claim’s subject matter can be proved obvious is by establishing that there existed at the time of invention a known problem for which there was an obvious solution encompassed by the claims. *KSR*, 127 S. Ct. at 1742, 82 USPQ2d at 1397.

Applying the preceding legal principles to the Factual Findings of the record in this appeal, we determine that Appellant has not shown that the evidence fails to support the Examiner’s conclusion of obviousness. The evidence shows there was a known problem (moisture degrades MBA, a moisture-sensitive animal feed supplement (FF 1-2)) for which there was an obvious solution (coat the supplement with a non-toxic and substantially moisture impermeable protective film (FF 2-3)). Once one of ordinary skill in the art understood that moisture sensitive MBA animal feed supplements could be protected by coating with protective films such as films of hydrogenated tallow, it would have been obvious to apply such films to other supplement materials including anhydrous potassium carbonate which, as evidenced by Armand, was known for use as an animal feed supplement (FF 8) and also known to be moisture sensitive (FF 9).

Appellant contends that, chemically and physically, MBA is different from anhydrous potassium carbonate such that one cannot assume a coating for one of these materials is satisfactory for the other (Br. 7). But this argument overlooks what the references teach those of ordinary skill in the art: That compositions forming moisture impermeable films, that are non-toxic, and digestible form protective coatings (FF 5). There is no disclosure within Galler indicating that the chemical or physical nature of MBA, the material to be coated, is critical for completing the coating operation. Based upon the nature of the coating, the range of materials that can be used as the coating, and the lack of discussion of a chemical interaction between the MBA and the coating material, we determine that one of ordinary skill in the art would have expected to obtain the desired protective film on particles of anhydrous potassium carbonate when following the coating procedure of Galler.

Nor can we agree with Appellant's interpretation of Galler as limited to teaching a film material composed of a mixture of materials such as described in Example IX (Br. 8). Galler specifically describes examples using a single material as well as lists hydrogenated tallow as a useful material such that one of ordinary skill in the art would have reasonably expected that any of the film materials alone, or in mixture, would result in the desired non-toxic, moisture impermeable, digestible film desired (FF 4).

Nor has Appellant convinced us that there is no reason to combine the teachings of the references (Br. 8). The reason to combine the teachings of the references in this case arises from the evidence showing that the problem of moisture deterioration was known in the art, as was a solution to that problem based on coating the material with hydrogenated tallow. The

combination of the familiar methods of coating with hydrogenated tallow to the known moisture sensitive anhydrous potassium carbonate would yield the predictable result of protecting the anhydrous potassium carbonate particles from moisture. *See KSR*, 127 S. Ct. at 1742, 82 USPQ2d at 1397.

III. CONCLUSION

Appellant has not shown that the Examiner reversibly erred in rejecting claims 1 and 4-6 as obvious in view of Galler and Armand.

IV. DECISION

The Examiner's decision is AFFIRMED.

V. TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal maybe extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

clj

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